

Industry news and developments | GPS | Galileo | GLONASS

» DEFENSE

Air Force Tasks Raytheon Space Systems to Develop Guidance for Degraded-GPS Conditions

Munitions guidance experts at the Raytheon Co. Space and Airborne Systems in El Segundo, California, will design and demonstrate navigation and guidance technologies that can keep new generations of deep-penetrating bombs and missiles on target in conditions where signals from GPS satellite satellites are degraded or unavailable.

Raytheon is designing the technology under an \$11 million

contract awarded by the U.S. Air Force Research Laboratory's Munitions Directorate at Eglin Air Force Base.

Raytheon will develop GPS-degraded munitions guidance technology as part of the Air Force High Velocity Penetrating Weapon program, which seeks to develop technologies for a future rocket-boosted 2000-pound weapon with the penetration capability of a 5000-pound gravity-dropped bomb that could be carried in the weapons bay of

the F-35 Lighting II joint strike fighter and other fighter-bombers.

U.S. military officials are interested in developing deep-penetrating weapons such as the High Velocity Penetrating Weapon and the Massive Ordnance Penetrator (MOP) to attack and destroy deeply buried research facilities and weapons laboratories in areas such as Iran, which intelligence experts suspect is developing nuclear weapons from the supposed safety of underground bunkers.

» SURVEY

Trimble Acquires StruCad Business for Construction Sector

Trimble will acquire the StruCad and StruEngineer business from AceCad Software to expand its construction solutions.

StruCad is a 3D structural detailing system for steel detailers and fabricators. StruCad provides an environment for rapid detailing

automation, automatic fabrication shop drawings, and computer numeric control (CNC) machinery production deliverables. The software enables collaboration between engineers, detailers and fabricators in structural steel projects.

StruEngineer is an engineering

software enabling 3D steelwork modeling and construction management for engineering companies. It compresses the structural engineering layout and connection design in the conceptual phase to support more rapid and accurate estimating.

» WIRELESS

TomTom Signs Strategic Deal with Samsung

By Janice Partyka

TomTom has signed a strategic deal with Samsung whereby TomTom maps and location content will power the Wave 3 smartphone. TomTom will provide information to support daily location needs of Wave 3 users, from navigation to search and find.

The agreement gives Samsung access to TomTom global maps and premium location content including:

- Map coverage for 200 countries

globally, providing more than 35 million kilometers of road network.

- Points of interest.
- 3D City Maps and 3D Landmarks providing a visual orientation aid.
- Enterprise Traffic, delivering live road conditions, including the location and length of a traffic incident; and
- Speed cameras, providing a location alert for safety-related cameras to promote safe driving habits.



» **PROFESSIONAL OEM**

Telit Wireless to Acquire Navman Wireless OEM Solutions

Telit Wireless Solutions, a machine-to-machine (M2M) wireless technology company, has entered into a binding agreement to purchase Navman Wireless OEM Solutions, designer and manufacturer of GPS modules and solutions, for \$3 million in cash.

This latest Telit acquisition comes on the heels of its March 2011 acquisition of Motorola Solutions' M2M business and its July 2011 acquisition of Globalconnect, an M2M services and connectivity business. Navman is expected to generate approximately \$7.1 million of revenue and \$0.2M of EBITDA in the year to December 31, 2011. The transaction will be completed on Jan. 3, 2012.

According to Telit CEO Oozi Cats, the acquisition will make Telit a major contender in the GPS market while providing an enhanced product portfolio for its M2M customers.

George Arnott, vice president of global OEM solutions for Navman Wireless OEM Solutions, will be managing the business unit under Telit's ownership.

According to the "World GPS Market Forecast to 2013" from RNCOS, shipments of GPS devices will grow at a compounded annual growth rate (CAGR) of more than 20 percent this year through 2013 to reach 900 million units sold, generating more than \$70 billion in annual revenue. According to Telit Wireless, M2M is a fast-growing \$50 billion business transforming society through innovative connectivity in industries as diverse as healthcare, energy, transportation, security and consumer electronics. M2M delivers significant power and cost savings while increasing efficiency and reliability through cellular or other wireless platforms, Telit Wireless said.

» **SURVEY**

Leica Parent Hexagon Acquires Microsurvey

Hexagon has entered into an agreement to acquire all outstanding shares of MicroSurvey Software Inc., a Canadian-based developer of surveying and mapping software for the land surveying, construction, and forensic markets.

Headquartered in Kelowna, British Columbia, MicroSurvey employs 30 people and provides software solutions to customers around the world.

The acquisition of MicroSurvey

notably expands Hexagon's product offerings and software development capabilities for several of the company's key markets, including land surveying, construction and public safety, according to Ola Rollen, Hexagon AB CEO and president.

According to the announcement, excluding inter-company sales, MicroSurvey's turnover in 2010 amounted to roughly 2 million euros.

» **PRECISION AGRICULTURE**

NovAtel to Supply GNSS for Brazil Stara Ag Products

NovAtel Inc. and Stara S.A. Industria de Implementos Agricolas (Stara) have announced a new strategic partnership that will see NovAtel's GNSS positioning technology integrated into Stara's comprehensive line of precision agricultural products.

The convergence of these two manufacturers is expected to deliver a new level of accuracy and reliability

to Brazilian farmers, and to other users around the world who already use Stara precision farming technology, NovAtel said.

Under the agreement, NovAtel's precise positioning solutions using GPS, GLONASS, and GL1DE technology will be combined with Stara's precision agricultural and farm equipment product line.

More **THE BUSINESS**, page 30.

» EVENTS

Mobile World Congress 2012

February 27–March 1, 2012, Barcelona, Spain
www.mobileworldcongress.com

Editor-in-Chief Alan Cameron will represent *GPS World* at this conference celebrating the current state of mobile technology and offering a glimpse at the next great thing(s).

Munich Satellite Navigation Summit 2012

March 13–15, 2012, Munich, Germany
www.munich-satellite-navigation-summit.org

The Munich Satellite Navigation Summit 2012 is an International conference with global impact featuring high-ranking worldwide speakers from industry, science, and governments dealing with the directions of satellite navigation now and in the future.

European Geosciences Union General Assembly

April 22–27, 2012, Vienna, Austria

GPS-Wireless 2012

March 21–22, 2012, San Francisco, California;
www.gps-wireless.com

Held at the Hyatt Regency San Francisco Airport Hotel. Expert presentations and high-level networking. Conference director is **Kevin Dennehy**, *GPS World* contributing editor for location-based services and editor of the monthly *LBS Insider* newsletter.



<http://meetings.copernicus.org/egu2012/>

The EGU General Assembly 2012 will bring together geoscientists from all over the world into one meeting covering all disciplines of the Earth, planetary and space sciences. Especially for young scientists, it is the aim of the EGU to provide a forum where they can present

their work and discuss their ideas with experts in all fields of geosciences.

IEEE/ION PLANS 2012

April 24–26, 2012, Myrtle Beach, South Carolina
www.plansconference.org

IEEE's Aerospace and Electronics Systems Society (AESS) and The Institute of Navigation (ION) are jointly sponsoring the 2012 Position Location and Navigation Symposium (PLANS). The four-day conference includes one day (April 23) dedicated to tutorials and three days to technical sessions. Twenty-four half-day technical sessions are offered, with four sessions running simultaneously morning and afternoon for scientists, researchers and engineers to present their latest work in the field. Presentations range from fundamental research, to applications, to field test results. Topics include sensors, systems, optimal integration of multiple sensors, and novel or emerging technologies used in the field of navigation.

European Navigation Conference

April 25–April 27, 2012, Gdansk, Poland
www.enc2012.org

The Polish Navigation Forum is organizing the 2012 European Navigation Conference in year 2012 on behalf of the European Group of Institutes of Navigation (EUGIN). This Conference is one of the ENC series of EUGIN Conferences which have been organized by European Institutes annually for last 15 years.

International Conference on Localization and GNSS

June 25–27, 2012, Starnberg, Germany
www.icl-gnss.org/2012/

Driven by both market trends and legal regulations, there is a high demand for providing a robust localization solution, which will be available continuously, regardless of the specific environment or platform. ICL-GNSS thus addresses both satellite-based and complementary technologies.

More events online:
www.gpsworld.com/events



**PROFESSIONAL OEM
Route Optimization Software**

Navman Wireless has added a route optimization capability to its OnlineAVL2 fleet tracking software through integration with Dashfly's web-based mapping service. The option, available in the U.S. , is designed to save time, mileage and fuel by enabling dispatchers to calculate the fastest and shortest driving routes for up to 25 stops with one click, and then electronically transmitting the resulting routing information to Navman Wireless' M-Nav in-vehicle terminals for driver notification and turn-by-turn navigation. Dispatchers managing delivery, service, construction equipment transport and other vehicles can save an average of 55 minutes in planning and communicating a typical 10-stop route to drivers by automating the route optimization process.

Navman Wireless,
www.navmanwireless.com

**PROFESSIONAL OEM
Small Form Factor TCXOs**

Fox Electronics, supplier of frequency control solutions, has released a new TCXO in a compact 2.5 mm x 2.0 mm x 1.0 mm package designed for GPS applications. The new FOX922-GP Series oscillators are available in six supply voltage options ranging from 1.8 V to 3.3 V (+/-5% standard) for increased adaptability to any platform, Fox Electronics said. Offering a tight stability of up to +/-0.5 ppm across an operating temperature range of -30 degrees C to +85 degrees C, the RoHS-complaint SMD (surface mount device) oscillators with a gold termination finish are best suited for portable applications requiring precision timing. Standard frequencies for the new TCXO oscillators range from 16.367667 MHz to 38.400 MHz with ten varieties offered. Available with a clipped sine output waveform, the peak-to-peak voltage level is 0.8 V minimum. Phase noise at 16.369 MHz with 10 kHz offset is typically -147 dBc/Hz.



Fox Electronics, www.foxonline.com

**LBS/WIRELESS
Outdoor Recreation App**

The ViewRanger Outdoors GPS USA app and My.ViewRanger.com network is available through Apple and Android app stores. ViewRanger comes with unlimited access to detailed USA topographic maps, a placename search database, and access to a library of hiking guides. Features include high resolution mapping that can be used either online or offline of cellular data connectivity, active waypoint navigation, GPS track recording, a sports computer, point-of-interest and trail plotting, and location sharing. Trail guides and routes can be transferred between mobile device and website, or between devices such as an Android smartphone and an iPad. **ViewRanger,** www.viewranger.com

